

believed to contribute to neurologic injury. Agents aimed at blocking these mediators offer future therapeutic hopes: these have been shown to reduce brain edema, postmeningitic hearing loss and cochlear and brain cell injury in experimental meningitis. and Conclusions: In acute bacterial meningitis use of glycerol and maintenance instead of restricted fluids improve the outcomes; however, role of dexamethasone in prevention of hearing loss needs re-evaluation.

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Parasitology (Oral Presentation)

72.001

One year impact of a single dose of Praziquantel in five schistosomiasis endemic districts in Rwanda

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Background: Schistosomiasis is one of the most prevalent parasitic diseases in developing countries and has a negative impact on the health of the population and consequently the economics of those countries. In Rwanda, the mapping survey of schistosomiasis (and soiltransmitted helminths) conducted in 2007 by the Neglected Tropical Disease (NTD) control program have shown that only *S. mansoni* was prevalent at 2.7% in the whole country with a variation per district from 0 to 69.5%. The disease was more localized near lakes Burera, Ruhondo, Muhazi and Kivu. In total, height endemic districts were identified and a mass drug administration with praziquantel and albendazole was implemented.

Methods: The impact of the treatment programme was monitored through a cohort of 2,166 school children aged 7-16 years in five most infected districts. Their infection status with *S. mansoni* was determined by clinical and parasitological examination at baseline and at year one after treatment. The prevalence and intensity of *S. mansoni* before and after the treatment were analyzed.

Results: After one round of treatment, the prevalence of *S. mansoni* infection have been reduced significantly in all 5 districts from 11.2% [95% CI 9.8%-12.5%] at baseline to 2.0% [95% CI 1.4%-2.6%] at year one follow up. On the intensity, the median number of eggs in the 5 districts decreased by two from 72 eggs per gram (epg) of stool to 36 epg. The proportion of children with heavy *S. mansoni* infection was significantly reduced as well. Signs of early clinical morbidity of *S. mansoni* infection like bloody diarrhea, abdominal pain decreased significantly. The rate of hepatomegaly, which is a late clinical sign for *S. mansoni* was very low in that cohort.

significantly the prevalence and intensity of the infection and can contribute to the reduction of the morbidity due to *S. mansoni* in Rwanda.

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72.002

A comparative study of Arco and Coartem in the treatment of uncomplicated malaria in patients aged 4 months to 16 years attending Mulago hospital, Kampala, Uganda

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Background: Malaria is a major cause of child morbidity and mortality in Uganda. It accounts for 24-45% of outpatient visits in Uganda. The situation is worsened by the development of drug resistance and lengthy anti-malaria drug treatment which pose problems of compliance to medication. Both Arco and Coartem are Artemisinin Combination Therapies (ACTs). We conducted a study to compare the efficacy and safety of Arco a single dose drug and Coartem in the treatment of uncomplicated malaria in children aged 4 months – 16 years attending Mulago Hospital, Kampala Uganda.

Methods: A phase II single blinded randomized clinical trial was carried out between November 2007 and June 2008. We screened 3344 patients with fever for malaria of whom 353 had positive blood smear, 225 fulfilled the inclusion criteria and were randomized into the two study arms i.e. Arco and Coartem arms. The study patients were followed up for 42 days.

Results: There was 100% parasite clearance by day 2 in both the ARCO and Coartem arms of the study. The overall cure rate on day 42 of follow up was 98% for both Arco and Coartem. Recrudescence occurred in 2 patients in the Arco arm of the study by day 42 and in 2 patients on Coartem by day 21 of follow up. No statistically significant difference in resolution of fever, vomiting, dizziness and back pain was observed throughout the follow up period of the study. No difference was observed in the clinical presentation between the two treatment arms. No serious adverse events were reported/observed in either of the study arms.

Conclusion: Arco and Coartem are equally effective and safe in the treatment of uncomplicated malaria in children aged 4 months to 16 years. Arco is a suitable ACT in the treatment of uncomplicated malaria in children.

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